

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 5, 10-12, 15, 20-22. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently Amended) An apparatus for processing a calling tone of a portable device in
2 a wire/wireless telephone, said apparatus comprising:

3 a detector means for detecting providing an indication of electric field strength of a ring
4 receiving generation control signal when the ring receiving generation control signal is received from
5 a fixed device after a ring signal is received;

6 a distance measurer means for measuring gauge obtaining a representation of a distance to
7 the fixed device by using the indication of the electric field strength detected provided by the detector
8 means; and

9 a controller means for comparing the distance measured by the distance measurer means to
10 a preset reference distance, and for controlling generation of a melody sound for a received ring
11 according to a comparison result between the representation of the distance and a reference distance.

1 2. (Currently Amended) The apparatus of claim 1, wherein the distance ~~measurer means~~
2 gauge includes a comparator for comparing the indication of the electric field strength detected by
3 the detector means to a plurality of preset electric field strength values corresponding to distance

4 values between the portable device and the fixed device.

1 3. (Original) The apparatus of claim 2, further comprising storage means for storing the
2 preset electric field strength values and distance values corresponding to the electric field strength
3 values.

1 4. (Original) The apparatus of claim 1, further comprising storage means for storing the
2 preset electric field strength values and distance values corresponding to the electric field strength
3 values.

1 5. (Currently Amended) The apparatus of claim 1, further comprising display means for
2 displaying a ring receiving message corresponding to a receiving message ~~generation~~ display control
3 signal generated in the controller means regardless of the ~~measured~~ distance measured by the
4 distance measurer.

1 6. (Original) The apparatus of claim 1, wherein the controller means disables generation of
2 the melody sound when the distance measured by the distance measurer means is less than the preset
3 reference distance, and generates the melody sound when the measured distance is not less than the
4 preset reference distance.

1 7. (Original) An apparatus for processing a calling tone of a portable device in a

2 wire/wireless telephone, said apparatus comprising:

3 key input means for supplying a key input signal to select one of an automatic mode and a
4 manual mode;

5 detector means for detecting electric field strength of a ring receiving generation control
6 signal when the ring receiving generation control signal is received from a fixed device after the
7 automatic mode is set by the key input unit means and a ring is received;

8 distance measurer means for comparing the electric field strength detected by the detector
9 means to preset electric field strength values so as to measure distance to the fixed device; and

10 controller means for comparing the measured distance to a preset reference distance, and for
11 controlling generation of a melody sound for a received ring signal according to a comparison result.

1 8. (Original) The apparatus of claim 7, wherein the manual mode of the key input means
2 includes a first selection mode for resetting the preset reference distance and a second selection mode
3 for generation of the melody sound by the controller whenever the ring signal is received without
4 regard to the distance measured by the distance measurer means.

1 9. (Original) The apparatus of claim 8, wherein when a user selects the manual mode by
2 means of the key input means, the controller means compares the distance measured by the distance
3 measurer means to the reference distance reset by the user in the manual mode, and controls
4 generation of the melody sound for the received ring according to the comparison result.

1 10. (Currently Amended) The apparatus of claim 6 7, further comprising a storage unit, and
2 wherein, when the automatic mode is selected by means of the key input means, the preset electric
3 field strength values and distance values corresponding to the preset electric field strength values are
4 stored in the storage unit, and when the manual mode is selected by means of the key input means,
5 the storage unit stores a reference distance value selected by the user under control of the controller
6 means.

1 11. (Currently Amended) The apparatus of claim 6 7, further comprising display means for
2 displaying a ring receiving message corresponding to a receiving message ~~generation~~ display control
3 signal generated in the controller means regardless of mode selection by means of the key input
4 means and the distance measured by the distance measurer means.

1 12. (Currently Amended) The apparatus of claim 6 7, wherein the controller means disables
2 the generation of the melody sound when the distance measured by the distance measurer means is
3 less than the preset reference distance, and generates the melody sound when the measured distance
4 is not less than the preset reference distance.

1 13. (Original) An apparatus for processing a calling tone of a wire/wireless telephone, said
2 apparatus comprising:
3 a fixed device for receiving a ring signal through a local line, for generating a receiving
4 melody sound corresponding to the received ring signal, and for wirelessly transmitting a signal

5 corresponding to a ring receiving generation control signal at the same time; and

6 a portable device for receiving the signal corresponding to the ring receiving generation
7 control signal transmitted by the fixed device, for measuring distance to the fixed device according
8 to a detected electric field strength by detecting the electric field strength of the received signal, and
9 for selectively generating a calling tone according to the measured distance to the fixed device;

10 wherein the portable device disables generation of the calling tone when the measured
11 distance is less than a preset reference distance, and generates the calling tone when the measured
12 distance is not less than the reference distance.

1 14. (Original) The apparatus of claim 13, wherein the portable device comprises:

2 a receiver for receiving a wireless signal corresponding to the ring receiving generation
3 control signal transmitted by the fixed device;

4 a detector for detecting an electric field strength corresponding to the ring receiving
5 generation control signal received from the receiver;

6 a distance measurer for comparing the electric field strength detected by the detector to preset
7 electric field strength values, and for measuring distance to the fixed device;

8 a controller for disabling generation of a melody sound when the distance measured by the
9 distance measurer is less than the reference distance, for generating the melody sound when the
10 measured distance is not less than the reference distance, and for generating a receiving message
11 display control signal regardless of the measured distance;

12 a display for displaying a ring receiving message corresponding to the receiving message

display control signal generated by the controller; and

a storage for storing the preset electric field strength values and distance values corresponding to the preset electric field strength values.

15. (Currently Amended) The apparatus of claim 13, wherein the portable device comprises:

a key input unit for supplying a key input signal for selecting one of an automatic mode and a manual mode according to a user selection;

a detector for detecting electric field strength of a ring receiving generation control signal when the ring receiving generation control signal is received from the fixed device after the automatic mode is set by the key input unit and a ring is received;

a distance measurer for comparing the electric field strength detected by the detector to preset electric field strength values, and for measuring the distance to the fixed device;

a controller for comparing the distance measured by the distance measurer with the preset reference distance, and for controlling generation of a melody sound for the received ring signal according to a comparison result;

a storage for storing the preset electric field strength values and distance values corresponding to the preset electric field strength values when the automatic mode is selected by the key input unit, and for storing a reference distance value selected by a user under control of the controller when the manual mode is selected by the key input unit; and

a display for displaying a ring receiving message corresponding to a receiving message ~~generation~~ display control signal generated in the controller regardless of mode selection by the key

18 input unit and the distance measured by the distance measurer.

1 16. (Original) The apparatus of claim 13, further comprising a key input unit and a distance
2 measurer, wherein when a user selects a manual mode by means of the key input unit, the controller
3 compares a distance measured by the distance measurer to a reference distance reset by the user in
4 the manual mode, and controls generation of a melody sound corresponding to a received ring signal
5 according to a comparison result.

1 17. (Original) A method of processing a calling tone of a portable device in a wire/wireless
2 telephone, comprising the steps of:

3 receiving a wireless signal comprising a ring receiving generation control signal transmitted
4 from a fixed device;

5 detecting an electric field strength of the received ring receiving generation control signal;
6 measuring a distance to the fixed device by comparing the detected electric field strength
7 with preset electric field strength values;

8 generating a receiving message display control signal regardless of the measured distance;

9 disabling generation of a melody sound when the measured distance is less than a preset
10 reference distance;

11 generating the melody sound when the measured distance is not less than the preset reference
12 distance; and

13 displaying a ring receiving message corresponding to the ring receiving message display

14 control signal.

1 18. (Original) A method of processing a calling tone of a portable device in a wire/wireless
2 telephone, comprising the steps of:

3 supplying a key input signal to select one of an automatic mode and a manual mode
4 according to user selection;

5 detecting an electric field strength of a ring receiving generation control signal when the ring
6 receiving generation control signal is received from a fixed device after the automatic mode is
7 selected in the supplying step and a ring is received;

8 measuring a distance to the fixed device by comparing the detected electric field strength to
9 preset electric field strength values; and

10 disabling generation of a melody sound when the measured distance is less than the preset
11 reference distance, and generating the melody sound when the measured distance is not less than a
12 preset reference distance.

1 19. (Original) The method of claim 18, wherein, in the step of generating the melody sound
2 when the manual mode is selected by a user, the measured distance is compared to a reference
3 distance reset by the user in the manual mode, and a calling tone for a received ring signal is
4 selectively processed according to a comparison result.

1 20. (Currently Amended) A method of processing a calling tone of a wire/wireless telephone

2 having a fixed device and a portable device, comprising the steps of:

3 receiving a ring signal through a local line connected to the fixed device;

4 processing in the fixed device a calling tone corresponding to the received ring signal;

5 wirelessly transmitting a signal, in accordance with a ring receiving generation control signal,

6 from the fixed device to the portable device; and

7 receiving in the portable device the signal, in accordance with the ring receiving generation
8 control signal transmitted from the fixed device;

9 measuring distance from the portable device to the fixed device according to a detected
10 electric field strength by detecting the electric field strength of the received signal;

11 selectively processing the calling tone in the portable device according to a the measured
12 distance to the fixed device ~~by detecting an electric field strength of the transmitted signal as~~
13 ~~received, and by measuring a distance to the fixed device according to the detected electric field~~
14 ~~strength after receiving the transmitted signal;~~

15 wherein the processing step in the portable device disables the processing of the calling tone
16 when the measured distance is less than a preset reference distance, and generates the calling tone
17 when the measured distance is not less than the preset reference distance.

1 21. (Currently Amended) The method of claim 20, wherein the processing step in the
2 portable device comprises the sub-steps of:

3 receiving a wireless signal comprising a ring receiving generation control signal transmitted

4 ~~by~~ from the fixed device to the portable device;

5 detecting an electric field strength of the ring receiving generation control signal;
6 measuring a distance to the fixed device by comparing the detected electric field strength to
7 preset electric field strength values;
8 generating a receiving message display control signal regardless of the measured distance;
9 disabling generation of a melody sound when the measured distance is less than the preset
10 reference distance;
11 generating the melody sound when the measured distance is not less than the preset reference
12 distance; and
13 displaying a ring receiving message in accordance with a the generated ~~ring~~ receiving
14 message ~~generation~~ display control signal.

1 22. (Currently Amended) The method of claim 20, wherein the processing step comprises
2 the sub-steps of:

3 selecting one of an automatic mode and a manual mode according to user selection;
4 detecting an electric field strength of the ring receiving generation control signal when the
5 ring receiving generation control signal is received from the fixed device after a ring is received and
6 the automatic mode is selected by a user;
7 measuring a distance to the fixed device by comparing the detected electric field strength to
8 preset electric field strength values;
9 selectively processing a calling tone for a received ring according to a comparison result
10 obtained by comparing the measured distance to the preset reference distance; and

11 displaying a ring receiving message corresponding to a generated receiving message
12 ~~generation~~ display control signal regardless of mode selection and the measured distance.

1 23. (Original) The method of claim 22, wherein when the manual mode is selected in the
2 selecting sub-step, the measured distance is compared to a reference distance reset by the user in the
3 manual mode, and the calling tone for the received ring is selectively processed according to a
comparison result.